

Application No.: 10/582,468
Filing Date: March 23, 2007

AMENDMENTS TO THE CLAIMS

Please replace all prior versions of the claims with the following listing of the claims. Please note that in the amendments to the claims, deletions are indicated by strikethrough (e.g. ~~deletion~~) or double brackets (e.g. [[word]]) and additions to the claims are underlined (e.g. addition).

1. **(Previously Presented)** A dental component for extending at least partially in a hole formed in jaw bone and through soft tissue belonging to the jaw bone, the dental component comprising one or more titanium dioxide layers applied on at least one outer surface of the dental component, wherein between about 70-100% of each layer comprises crystalline titanium dioxide in the anatase phase.
2. **(Canceled)**
3. **(Previously Presented)** The dental component as in claim 1, wherein each layer has a thickness of between about 0.05 - 10 μm .
4. **(Previously Presented)** The dental component as in claim 1, wherein a majority of the outer surfaces of the dental component are provided with crystalline titanium dioxide in the anatase phase.
5. **(Previously Presented)** The dental component as in claim 1, wherein a plurality of the outer surfaces of the dental component are provided with crystalline titanium dioxide in the anatase phase.
6. **(Previously Presented)** The dental component as in claim 1, wherein the dental component comprises a portion which can be placed against the soft tissue.
7. **(Previously Presented)** The dental component as in claim 1, wherein each titanium dioxide layer in the crystalline anatase phase comprises a bone stimulation substance.
8. **(Currently Amended)** The dental component as in claim 1, wherein an outer thread located on the dental component is provided with an outer layer comprising crystalline titanium dioxide in the anatase phase.
9. **(Previously Presented)** The dental component as in claim 1, wherein a portion of the dental component configured to be placed against the soft tissue comprises a threadless outer surface.

10. **(Previously Presented)** The dental component as in claim 1, wherein a portion of the dental component is coated with a layer of crystalline titanium dioxide in the anatase phase, and a remaining portion of the dental component comprises a part directed away from the dental component and is coated with a layer of crystalline titanium dioxide in the amorphous, rutile, or anatase phase.

11. **(Withdrawn)** A method for producing a dental component, comprising:
applying to outer layers of the dental component a liquid or electrolyte under voltage, and

choosing the voltage and the dwell time of the dental component in the liquid or electrolyte such that titanium dioxide, largely assumes the crystalline anatase phase.

12. **(Withdrawn)** The method as in claim 11, wherein characterized in that, for a given or predetermined first concentration of electrolyte, the voltage is chosen with a first value in the range of 100-270 volts, and in that, at a second concentration or composition of electrolyte, the voltage is chosen with a second value.

13. **(Withdrawn)** The method as claimed in patent claim 11 or 12, characterized in that the crystalline titanium dioxide is supplemented with a growth-stimulating substance, e. g. BMP, and/or measures.

14. **(Previously Presented)** The dental component of claim 1, wherein each layer comprises crystalline titanium dioxide which completely assumes the anatase phase.

15. **(Previously Presented)** The dental component as in claim 10, wherein the portion of the dental component is coated with layers of crystalline titanium dioxide in the anatase phase along 2/3 of its length.

16. **(Previously Presented)** The dental component as in claim 1, further comprising a bone stimulation substance disposed on the dental component.

17. **(Withdrawn)** The method as in claim 11, wherein the liquid comprises sulfuric acid or phosphoric acid.

18. **(Previously Presented)** The dental component as in claim 16, wherein the bone stimulation substance comprises BMP.

19. **(New)** A dental implant for extending at least partially in a hole formed in jaw bone and through soft tissue belonging to the jaw bone, the dental implant comprising at least

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one thread extending along a body of the implant, the dental implant further comprising one or more titanium dioxide layers applied on at least one outer surface of the dental implant, wherein between about 70-100% of each layer comprises crystalline titanium dioxide in the anatase phase.

20. (New) The dental component as in claim 1, wherein each layer has a thickness of between about 0.05 - 10 μm .